

ABSTRACT

An information coding apparatus, an information decoding apparatus, and a method and a program therefor are provided, which can represent a large amount of information with a small number of pixels. Information bits which are inputted are coded as a block of a two-dimensional image made up from m (where m is a natural number) \times n (where n is a natural number) pixels. Specifically, pixels which represent the information bits are arranged in a code area, which is an area of $(m - o) \times (n - p)$ pixels within a code block of $m \times n$ pixels (where o and p are natural numbers which satisfy $0 < o < m$ and $0 < p < n$); and, no pixels which represent the information bits are arranged in a guide area, which is an area of the other pixels within the code block of $m \times n$ pixels.